

## REMARKS

In the final action, claims 1-10, 12 and 13 have been rejected in light of the prior art. In this amendment, claims have been amended as indicated above, Accordingly, claims 1-10, 12 and 13 are pending and at issue.

The newly submitted claim 1 is believed allowable under 35 U.S.C. § 112, first paragraph since the added sentence "whose projection on the display system defines an impact position of a shot on said display system" is supported by the specification (page 6, lines 5 to 9 and lines 18 to 21) and is perfectly understood by a man skilled in the art.

Turning now to prior art rejections, claims 1-3, 6, 8 and 10 have been rejected under 35USC 102(a) as being clearly anticipated by "3DZoneMaster", collectively referenced to:

- [www.proxy-ms.co.il/pegasus.htm](http://www.proxy-ms.co.il/pegasus.htm) (1998),
- [www.mpog.com/reviews/hardware/controls/-techmedia/3dzone](http://www.mpog.com/reviews/hardware/controls/-techmedia/3dzone) (1997),
- [www.gamesdomain.co.uk/-gdreview/zones/review/hardware/-jan98/3dz prnt.html](http://www.gamesdomain.co.uk/-gdreview/zones/review/hardware/-jan98/3dz prnt.html) (Janv. 1998)
- [www.time.com/time/magazine/-1997/dom/971215/-techwatch.html](http://www.time.com/time/magazine/-1997/dom/971215/-techwatch.html) (Dec. 1997) and
- [www.Gamersu.com/reviews/hardware.sap?id=11](http://www.Gamersu.com/reviews/hardware.sap?id=11) (hereinafter 3DZoneMaster).

The applicants respectfully submit that 3DZoneMaster fails to disclose each and every element of the pending claims, and therefore fails to anticipate the pending claims.

Claim 1, as well as the dependant claims there from, specify, a pistol for a video game shooting system used by a player to enable a virtual actor to shoot at least one virtual target, the system comprising:

- a display system which can display an image of the video game shooting system incorporating the at least one virtual target, said image being representative of a viewing field of the virtual actor;
- a game processing means having at least one microprocessor which is connectable to said display system to control said image of the video game shooting system on said display system; and

the pistol, which is connectable to said game processing means, comprising a grip supporting a frame which defines a shooting axis whose projection on the display system defines an impact position of a shot on said display system, said pistol further comprises a means for triggering shots on the at least one virtual target following the shooting axis, said means for triggering shots being activated by the player to send a shooting instruction to said game processing means at an instant chosen by the player, wherein the displacement of said shooting axis relative to the display system and the virtual actor is caused by an orientation of the frame of the pistol relative to said display system due to the player's action,

wherein the pistol further comprises an integrated means to control a movement of the viewing field of the virtual actor, enabling the player to move the virtual actor in the video game shooting system and to shoot in a location and at a moment chosen by the player.

In order to explain in more detail the distinction between the present invention according to pending claim 1 and "3DZoneMaster", the applicants submit enclosed herewith an annex comprising two figures 1 and 2 respectively representing the functional principle of the "3DZoneMaster" and of the pistol for a video game shooting system according to claim 1.

It should be noted that the pistol according to claim 1 comprises (as can be also seen on figure 2 of the Annex) "a grip supporting **a frame which defines a shooting axis whose projection on the display system defines an impact position of a shot on said display system**". Further, claim 1 mentions that the displacement of the shooting axis relative to the display system is caused by an orientation of the frame of the pistol relative to said display system due to the player's action. Therefore, it is perfectly clear and obvious that the pistol and more exactly **its frame directly interacts with the display system** by optical properties. This feature of claim 1, which can be perfectly understood by a man skilled in the art, means that the present invention is based on the fact that the pistol is intended to be only used for light gun games. Further, it is also clear for a man skilled in the art that the pistol used for light gun games and which directly interacts with the display system, generally comprises a pointing device comprising a light sensor incorporated in the free end of the frame. The man skilled in the art understands also that the light sensor of the frame is adapted for detecting a light spot which scans the display system for defining the projection of the shooting axis of the pistol on the display system.

Consequently, as represented on figure 2, when the player takes the pistol in his hand and aims at the display system, "the frame defines a shooting axis whose projection on the display system defines an impact position of the shot on the display system" and this without the presence of a cursor. Indeed, as represented in figure 2, the player directly shoots a virtual target on the display system by the alignment of his eye with the frame of the pistol and with said virtual target.

3 DZoneMaster fails to disclose such elements.

In the final Office action, the Examiner states (see items b.i; page 3 of the Final Action) that 3DZoneMaster ([www.gamersu.com](http://www.gamersu.com)) comprises "a grip and a barrel, wherein the barrel forms a frame that defines the shooting axis". Further, the Examiner also states (see item b.iii; page 3 of the Final Action) that "the displacement of the shooting axis of the D3ZoneMaster relative to the display system and the virtual actor is caused by an orientation of the frame of the pistol relative to the display system due to the player's action. See [www.gamesdomain.co.uk](http://www.gamesdomain.co.uk). pp.2-3".

After a detailed rereading of these two references cited by the Examiner, it appears that none of them discloses or suggests the features mentioned by the Examiner. Further, none of these references discloses the fact that the frame of the pistol defines a shooting axis whose projection on the display system defines the location or the impact position of a shot on the display system.

Consequently, the applicants ask the Examiner to exactly mention the sentences of these two references which could disclose the features as mentioned above.

In fact, 3DZoneMaster discloses an ultrasonic wireless 3D device which utilizes ultrasonic sound waves to triangulate the location of the device. 3DZoneMaster also uses the infrared signals only to monitor all buttons and programmable point of view. (See reference [www.proxy-ms.co.il](http://www.proxy-ms.co.il) ; question: how does the 3DZoneMaster work?)

Consequently, 3DZoneMaster has an ultrasonic sound generator that transmits signals to an ultrasonic positioning sensor comprising an L-shaped bracket. The ultrasonic positioning sensor can be located onto the monitor or display system or spaced apart from the display system, which displays an image incorporating at least one virtual target. (See figure 1 of the Annex enclosed herewith).

Therefore, if it is supposed that 3DZoneMaster defines a shooting axis, that is wrong, this shooting axis would interact with the ultrasonic positioning sensor but not at all with the display system (see figure 1).

As indicated in all the references cited by the Examiner, the aim feature of the 3DZoneMaster concerns the ultrasonic tracking means allowing for three dimensional movements in the X, Y and Z axis.

More exactly, as indicated for example in the references [www.gamesdomain.co.uk](http://www.gamesdomain.co.uk) (see first paragraph) the aim advantage of the 3DZoneMaster lies in the fact that it brings true 3D positioning to computer gaming, to wit, up/down, left/right and forward/back due to the ultrasonic tracking means.

**Consequently, the 3DZoneMaster device does not interact with the display system but with the positioning sensor spaced apart from the display system. Consequently 3DZoneMaster does not use a shooting axis and there is no alignment between the eye of the player, the 3DZone Master device and the target displayed on the display system. (See figure 1 of the Annex)**

**With the 3DZoneMaster device, the player moves the cursor on the display system by moving the device or 3D wireless mouse relative to its corresponding positioning sensor, and thus it is absolutely necessary to have a cursor displayed on the display system in order to permit to the player to superimpose said cursor with the target before the activation of the means for triggering shots.**

On the contrary, with the pistol according to pending claim 1, it is not necessary to have a cursor displayed on the display system; since said pistol comprises a grip supporting a frame which itself defines a shooting axis.

Therefore, the displacement and the projection of the shooting axis relative to the display system is caused by the orientation of the frame of the pistol relative to the display system. **The presence of a cursor on the display system is not necessary due to the alignment between the eye of the player, the frame of the pistol and the target displayed on the display system.** Therefore, the player directly shoots the virtual target on the display system with the alignment of the frame relative to the display system. These features permit to the player to shoot with the pistol according to claim 1 in optimal conditions which come very close to reality.

**No disclosure of a pistol comprising a frame defining a shooting axis whose projection on the display system defines the impact position of the shot on said display system and which can be displaced by an orientation of said frame relative to the display system is provided by 3DZoneMaster.**

The applicants therefore respectfully request that the anticipation rejection under 35 U.S.C. 102(a) be withdrawn.

Claims 4, 5, 7, 9 and 12-13 have been also rejected under 35 U.S.C. 103(a) as being unpatentable over 3DZoneMaster. By way of this amendment, claim 1 has been amended as indicated above and the other claims are directly or indirectly dependent on claim 1.

As mentioned above, the 3DZoneMaster never discloses nor suggests a pistol comprising a frame defining a shooting axis whose projection on the display system defines an impact position of a shot on said display system and which can be displaced by an orientation of the frame relative to the display system.

Further, a man skilled in the art would have discarded the 3DZoneMaster which teaches the use of ultrasonic tracking means allowing for three dimensional movements, this feature being presented as the main feature of the 3DZoneMaster, which is opposite to the shooting method employed with the pistol according to pending claim 1.

So, a man skilled in the art would not have been led to the solution as claimed in claim 1 in view of the 3DZoneMaster taken in combination with another reference, since the 3DZoneMaster is based on ultrasonic tracking means which is presented as the main feature of this wireless mouse.

The applicants therefore respectfully request that the obviousness rejection be withdrawn.

In accordance with the provisions of 37 C.F.R. 1.21, attached to the amendment is a marked-up version of the changes made to claim 1 by the current amendment. The attached page is captioned "version with markings to show changes made".

In light of the foregoing, the prompt issuance of a notice of allowance is respectfully solicited. Should the Examiner have any questions, he is respectfully invited to telephone the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stanley J. Gradisar". The signature is fluid and cursive, with the first name "Stanley" and last name "Gradisar" clearly distinguishable.

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February 26, 2003

VERSION WITH MARKINGS TO SHOW CHANGES MADE IN THE CLAIMS

1. (twice amended) A pistol for a video game shooting system used by a player to enable a virtual actor to shoot at at least one virtual target, the system comprising:

a display system which can display an image of the video game shooting system incorporating the at least one virtual target, said image being representative of a viewing field of the virtual actor;

a game processing means having at least one microprocessor which is connectable to said display system to control said image of the video game shooting system on said display system; and

the pistol, which is connectable to said game processing means, comprises a grip supporting a frame which defines a shooting axis whose projection on the display system defines an impact position of a shot on said display system, said pistol further comprises a means for triggering shots on the at least one virtual target following the shooting axis, said means for triggering shoots being activated by the player to send a shooting instruction to said game processing means at an instant chosen by the player, wherein the displacement of said shooting axis relative to the display system and the virtual actor is caused by an orientation of the frame of the pistol relative to said display system due to the player's action,

wherein the pistol further comprises an integrated means to control a movement of the viewing field of the virtual actor, enabling the player to move the virtual actor in the video game shooting system and to shoot in a location and at a moment chosen by the player.